

ABSTRACT OF THE DISCLOSURE

The invention provides an electric resistance furnace comprising an axially vertical, hollow center heating element, a center furnace body that comprises a
5 heat-insulating member and is provided for supporting the center heating element, and a preheating means that is provided at a gap from the surface of the center furnace body and comprises a preheating element provided on the inner wall surface of a cylindrical heat-insulating member.
10 A heat-insulating member is located at an upper surface and a lower surface of an outer heat-insulating member located around the preheating member and only on a center axis side of the furnace with respect to the area of projection of the preheating means.